Claims

1. A process for the manufacture of a pharmaceutical preparation for the application of anti-inflammatory, especially antiseptic agents and/or agents which promote the healing of wounds to the upper respiratory tract and/or the ear, characterised in that the preparation contains at least one of said agents combined with a particulate carrier.

2. The process of claim 1,
characterised in that said particulate carrier comprises at least one of a liposome preparation, a microsphere preparation, a nanoparticle preparation, a Large Porous Particle preparation, or a laser-pulse polymer coated molecule preparation.

3. The process according to claim 1 or 2,
characterised in that at least the greatest part of said agent is encapsulated inside the carrier, especially a liposome or microsphere carrier.

4. The process of any one of claims 1 to 3,
characterised in that the anti-inflammatory agent is an antiseptic agent, an antibiotic, a corticosteroid, or a wound-healing promoting agent.

5. The process of any one of claims 1 to 4, characterised in that the antiseptic agent is selected from oxygen- and halogen-releasing compounds; metal compounds, such as silver and mercury compounds; organic disinfectants including inter alia formaldehyde-releasing compounds, alcohols, phenols including alkyl- and arylphenols as well as halogenated phenols, quinolines and acridines, hexahydropyrimidines, quaternary ammonium compounds and iminium salts, and guanidines.

6. The process according to claim 5, characterised in that the antiseptic agent is selected from the group comprising metal compounds such as mercury compounds, phenol derivatives such as thymol, eugenol and hexachlorophene, iodine and iodine complexes.

7. The process according to claim 6, characterised in that the antiseptic agent is povidone iodine.

8. The process according to any one of claims 1 to 7, characterised in that the wound-healing promoting agent is selected from agents promoting granulation and epithelization such as dexpanthenol, allantoines, azulenes, tannines, compounds from the vitamin B series, or similarly acting agents.

9. The process according to any one of the preceding claims, characterised in that the preparation contains at least one antiseptic and at least one wound-healing promoting agent.

10. The process according to any one of the preceding claims, characterised in that the carrier particles, especially liposomes, have a substantially uniform size in the range between about 20 and about 20,000 nm, preferably in the range between about 50 and about 4,000 nm, more preferably between 500 and 2,500 nm and especially preferably a uniform size of about 1,000 nm diameter.

11. The process according to any one of the preceding claims, characterised in that the carrier, especially liposome, preparation releases the agent over an extended time period, preferably an extended time period of several hours duration.

12. The process according to claim 11, characterised in that the carrier, especially liposome, preparation releases the agent at approximately the same release rate over the release time period.

13. The process according to any one of the preceding claims, characterised in that the preparation additionally comprises at least one

anaesthetically active agent.

14. The process according to any one of the preceding claims, characterised in that the preparation contains additives and adjuvants such as conserving agents, antioxidants and consistency-forming additives.

15. The process according to any one of claims 1 to 14, the preparation being in the form of a solution or dispersion comprising the active-agent loaded carrier, especially in the form of liposomes, preferably in the form of a liquid pharmaceutical preparation.

16. The process according to any one of claims 1 to 14, the preparation being in the form of a hydrophilic or amphiphilic cream, comprising the carrier and agent formulation in a hydrophilic or amphiphilic cream base, or in the form of a pharmaceutical O/W or W/O lotion.

17. The process according to any one of claims 1 to 14, the preparation being in the form of a pharmaceutical ointment, containing the carrier and agent or agents in a pharmaceutical ointment base.

18. The process according to any one of claims 1 to 14, the preparation being in the form of a pharmaceutical gel, especially a non- alcoholic hydrogel containing the carrier and agent or agents in a pharmaceutically acceptable hydrogel basis.

19. The process according to any one of claims 1 to 14, the preparation being in the form of a spray containing the carrier and agent in a pharmaceutically acceptable sprayable solid or liquid formulation.

20. The process according to any one of the preceding claims, the preparation being in the form of a pharmaceutical solution or dispersion formulation, which comprises:

a) liposomes comprising a pharmaceutically acceptable liposome membrane forming substance; and

b) a 0.1 to 2 % PVP iodine solution (at approximately 10 % available iodine in the PVP iodine complex) at least most of which is encapsulated by said liposome membranes,

wherein the liposomes are of substantially uniform size between about 50 and about 4,000 nm, and, in case, the formulation additionally comprises customary additives, adjuvants and auxiliary substances of a pharmaceutical solution or dispersion formulation.

21. The process according to claim 20, characterised in that the liposomes are of substantially uniform size, with diameters at around 1,000 nm, and the formulation is a gel.

22. The process according to any one of claims 1 to 21, wherein the preparation is suited for the treatment of infectious diseases or alleviation of diseases such as HIV infections which are accompanied by opportunistic infections or a suppressed immune system.

23. The process according to any one of claims 1 to 21, wherein the preparation is suited for the treatment of acute and/or chronic laryngopharyngitis, angina and/or rhinitis.

24. The process according to any one of claims 1 to 21, wherein the preparation is suited for functional and cosmetic tissue remodelling and repair treatments.

25. A method of preventing or treating infections and/or of functional and cosmetic tissue remodelling and repair, of the human or animal upper respiratory tract and/or ear, by applying, to said tract and/or ear, a pharmaceutical preparation comprising at least one anti-inflammatory, especially antiseptic agent and/or wound-healing promoting agent, said at least one agent being combined

with a particulate carrier in said preparation.

26. The method of claim 25, wherein said carrier comprises at least one of a liposome preparation, a microsphere preparation, a nanoparticle preparation, a Large Porous Particle preparation or a laser-pulse polymer coated molecule preparation.

27. The method of claim 25, wherein at least the greatest part of said agent is encapsulated inside the carrier, especially a liposome or microsphere carrier.

28. The method of claim 25, wherein the anti-inflammatory agent is selected from antiseptic agents, antibiotics, corticosteroids and wound-healing promoting agents.

29. The method of claim 25, wherein the antiseptic agent is selected from oxygen- and halogen-releasing compounds; metal compounds, such as silver and mercury compounds; organic disinfectants including inter alia formaldehyde-releasing compounds, alcohols, phenols including alkyl- and arylphenols as well as halogenated phenols, quinolines and acridines, hexahydropyrimidines, quaternary ammonium compounds and iminium salts, and guanidines.

30. The method of claim 25, wherein the antiseptic agent is selected from the group comprising metal compounds such as mercury compounds phenol derivatives such as thymol, eugenol and hexachlorophene, iodine and iodine complexes.

31. The method of claim 25, wherein the antiseptic agent is povidone iodine.

32. The method of claim 25, wherein the wound-healing promoting agent is selected from agents promoting granulation and epithelization such as dexpanthenol, allantoines, azulenes, tannines, compounds from the vitamin B series or similarly acting agents.

33. The method of claim 25, wherein the preparation contains at least one antiseptic and at least one wound-healing promoting agent.

34. The method of claim 25, wherein the carrier particles, especially liposomes, have a substantially uniform size in the range between about 20 and about 20,000 nm, preferably in the range between about 50 and about 4,000 nm, more preferably between 500 and 2,500 nm and especially preferably a uniform size of about 1,000 nm diameter.

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35. The method of claim 25, wherein the carrier, especially liposome, preparation releases the agent over an extended time period, preferably an extended time period of several hours duration.

36. The method of claim 25, wherein the carrier, especially liposome, preparation releases the agent at approximately the same release rate over the release time period.

37. The method of claim 25, wherein the preparation additionally comprises at least one anaesthetically active agent.

38. The method of claim 25, wherein the preparation contains additives and adjuvants such as conserving agents, antioxidants and consistency-forming additives.

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39. The method of claim 25, the preparation being in the form of a solution or dispersion comprising the active-agent loaded carrier, especially in the form of liposomes, preferably in the form of a liquid pharmaceutical preparation.

40. The method of claim 25, the preparation being in the form of a hydrophilic or amphiphilic cream, comprising the carrier and agent formulation in a hydrophilic or amphiphilic cream base, or in the form of a pharmaceutical O/W

or W/O lotion.

41. The method of claim 25, the preparation being in the form of a pharmaceutical ointment, containing the carrier and agent or agents in a pharmaceutical ointment base.

42. The method of claim 25, the preparation being in the form of a pharmaceutical gel, especially a non-alcoholic hydrogel containing the carrier and agent or agents in a pharmaceutically acceptable hydrogel basis.

43. The method of claim 25, the preparation being in the form of a spray containing the carrier and agent in a pharmaceutically acceptable sprayable solid or liquid formulation.

44. The method of claim 25, the preparation being in the form of a pharmaceutical solution or dispersion formulation, which comprises:

a) liposomes comprising a pharmaceutically acceptable liposome membrane forming substance; and

b) a 0.1 to 2 % PVP iodine solution (at approximately 10 % available iodine in the PVP iodine complex) at least most of which is encapsulated by said liposome membranes,

wherein the liposomes are of substantially uniform size between about 50

and about 4,000 nm, and, in case, the formulation additionally comprises customary additives, adjuvants and auxiliary substances of a pharmaceutical solution or dispersion formulation.

45. The method of claim 25, wherein the liposomes are of substantially uniform size, with diameters at around 1,000 nm, and the preparation is a gel.

46. The method of claim 25, wherein the preparation is suited for the treatment of infectious diseases or alleviation of diseases such as HIV infections which are accompanied by opportunistic infections or a suppressed immune system.

47. The method of claim 25, wherein the preparation is suited for the treatment of laryngopharyngitis, angina and/or rhinitis.